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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/736,413

**Applicant(s)**

FATULA, JOSEPH JOHN

**Examiner**

LIN LIU

**Art Unit**

2445

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13, 15-20, 22-25, 30-33, 35-42, 44 and 46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-20, 22-25, 30-33, 35-42, 44 and 46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is responsive to communications filed on 07/31/2008.

#### ***Response to Amendment***

2. Applicant amendment filed on 07/31/2008, has been received and considered, they are entered into the record.
3. As a result of the amendment claims 1, 16-19, 22-24, 30, 36-42, 44 and 46 have been amended.
4. Claims 1-13, 15-20, 22-25, 30-33, 35-42, 44 and 46 are pending and have been examined. Claims 14, 21, 26-29, 34, 43 and 45 are cancelled.

#### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-13, 15-20, 22-25, 30-33, 35-42, 44 and 46 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-13, 16-20, 22-25, 30-33, 35-42, 44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Beeler, JR.** (publication no.: US 2004/0083245 A1)

in view of **Schutzman et al. (Patent no.: US 6,505,216 B1)**, **Goddard (patent no.: US 6,883,110 B1)** and **Crawford (Patent no. US 5,771, 354)**.

With respect to **claim 1**, Beeler teaches a sequence management apparatus for backing up data across a plurality of servers (Beeler, fig. 5), the apparatus comprising:

a client request module configured to receive data to be backed up from a source server (Beeler, page 5, paragraphs 78-79, noted that the workstation 30 initiates the backup request from a source server to target servers);

a sequence module configured to generate a non-transparent sequence of a plurality of target servers (Beeler, page 6, paragraph 84, noted that the a list of available target servers are generated), wherein the non-transparent sequence is unique and exclusively accessible to a global sequence manager (Beeler: page 6, paragraph 84-85, noted the list of available target servers); and

a packet storage module configured to store the data on the plurality of target servers according to the non-transparent sequence (Beeler, page 6, paragraph 91, and page 9, paragraph 121, noted that the data is backed up from the source server to target servers), wherein the source servers and the plurality of target servers are organized in a grid computing system (Beeler: fig. 5, page 2, paragraphs 15 & 19, noted the distributed processing system) and each physical distance between each target server is not less than a minimum distance packet proximity parameter and not more than a maximum distance packet proximity parameter (Beeler: fig. 3 & 5, page 5, paragraph 77 and page 6, paragraphs 84-85. Since Applicant has not included an explicitly meaning of the "minimum" and "maximum" distance packet proximity

parameter, the broadest interpretation of such terms are just any arbitrary distances between the servers that is reachable by other servers).

However, Beeler does not explicitly teach a method of performing data backup from a source client to a plurality of target servers.

In the same field of endeavor, Schutzman teaches a method of performing data backup from a source client to a plurality of the target servers. (Schutzman, fig. 2, and col. 13, lines 29-55, noted that the host client backs up data to the backup server and the data is being stored in the backup storage servers 114).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the backup host client as taught by Schutzman in Beeler's invention to perform data backup from a client device to a plurality of target storage servers via a source server.

However, the combined method of Beeler-Schutzman does not explicitly teach a method of performing data backup to plurality of the client computers according to a sequence order.

In the same field of endeavor, Goddard teaches a method of performing data backup to plurality of the client computers according to a sequence order (Goddard, figure 2, col. 4 line 60 to col. 5 line 13).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to substitute the plurality of target clients as taught by Goddard in the combined method of Beeler-Schutzman's invention in order to utilize available storage space of the client information handling systems as a distributed data backup

storage system without adding additional storage devices to the source client/source (Goddard, col. 5, lines 2-5).

However, the combined method of Beeler-Schutzman-Goddard does not explicitly teach a feature of having charging client usage fees determined by a subscription manager.

In the same field of endeavor, Crawford teaches a feature of having charging client usage fees determined by a subscription manager (Crawford: abstract, col. 8, lines 24-32 and col. 58, lines 8-39).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to integrate the feature of charging client usage fees by a subscription billing system as taught by Crawford in the combined method of Beeler-Schutzman-Goddard's invention in order to bill the clients for amount of resource being accessed.

A person of ordinary skill in the art at the time of the invention would have been motivated to make the modification to the combined method of Beeler-Schutzman-Goddard's invention, because having a feature of logging user's usage for the access-granted users would not only allow the system to track the user's usage but also allow the system to have better security access (Crawford: col. 58, lines 40-67).

With respect to **claim 2**, Beeler teaches the apparatus of claim 1, wherein the global profile management module configured to manage a metadata file, the metadata file descriptive of the data backed up on the plurality of target clients (Beeler, fig. 17, page 8, paragraph 105, noted the transaction log).

With respect to **claim 3**, Beeler teaches the apparatus of claim 2, wherein the metadata file is selected from the group consisting of a global client profile, a source client profile, a source data record, a target data record, a data assembly record, and a global backup log (Beeler, fig. 17, page 8, paragraph 105, noted the transaction log).

With respect to **claim 4**, the combined method of Beeler and Schutzman teaches all the claimed limitations, except that they do not explicitly teach a method of using a unique data identifier corresponding to the data to map the data to the source client, the unique data identifier identifying original, non-backup data and indicating a uniqueness of the data as compared to other data.

In the same field of endeavor, Goddard teaches a method of using a unique data identifier corresponding to the data to map the data to the source client, wherein the unique data identifier identifying original, non-backup data and indicating a uniqueness of the data as compared to other data (Goddard, fig. 2, col. 4 line 59 to col. 5 line 13, noted the server data identifiers).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of server data identifiers as taught by Goddard in the combined method of Beeler's and Schutzman's invention in order to backup and restore data based on the server data identifiers (Goddard, col. 5, lines 5-13).

With respect to **claim 5**, the combined method of Beeler and Schutzman teaches all the claimed limitations, except that they do not explicitly teach a method of mapping

the unique data identifier to a second source client on which an identical copy of the data is stored.

In the same field of endeavor, Goddard teaches a method of mapping the unique data identifier to a second source client on which an identical copy of the data is stored. (Goddard, fig. 2, col. 4 line 59 to col. 5 line 13).

With respect to **claim 6**, Beeler teaches the apparatus of claim 1, further comprising a packet retrieval module configured to retrieve at least a portion of the data backed up on one of the plurality of the target clients in response to a restore request from the source client (Beeler, page 6, paragraph 92, restore request).

With respect to **claim 7**, Beeler teaches the apparatus of claim 6, wherein the packet retrieval module is further configured to retrieve the at least a portion of the data backed up on one of the plurality of the target clients according to the non-transparent sequence generated by the sequence module (Beeler, page 6 paragraph 92, and page 10 paragraph 131).

With respect to **claim 8**, the combined method of Beeler and Schutzman teaches all the claimed limitations, except that they do not explicitly teach a method of assembling the data in a comprehensible format in response to a restore request from the source client.

In the same field of endeavor, Goddard teaches a method of assembling the data in a comprehensible format in response to a restore request from the source client (Goddard, fig. 5, col. 6, lines 12-27, noted that different portions of data is reconstructed and restored).



Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of reconstructing and restoring different portions of data from the target clients as taught by Goddard in the combined method of Beeler's and Schutzman's invention in order to back up data due to server failure (Goddard, col. 6, lines 41-52).

With respect to **claim 9**, Beeler teaches the apparatus of claim 1, wherein the packet storage module is further configured to separate the data into the plurality of backup data packets and to store the backup data packets on the plurality of target clients (Beeler, page 9, paragraph 113).

With respect to **claim 10**, Beeler teaches the apparatus of claim 9, further comprising a compression module configured to compress the data within the backup data packets prior to storing the backup data packets on the plurality of target clients (Beeler, page 9, paragraph 123, noted the compression algorithm used).

With respect to **claim 11**, Beeler teaches the apparatus of claim 9, further comprising an encryption module configured to encrypt the data within the backup data packets prior to storing the backup data packets on the plurality of target clients (Beeler, page 9, paragraph 123, noted the encryption algorithm).

With respect to **claim 12**, the combined method of Beeler and Schutzman teaches all the claimed limitations, except that they do not explicitly teach a method of creating a redundant backup data packet of at least one of the backup data packets prior to storing the backup data packets on the plurality of target clients.

In the same field of endeavor, Goddard teaches a method of creating a redundant data packet of at least one of the data packets prior to storing the data packets on the plurality of target clients (Goddard, col. 6, lines 41-52, noted the parity data).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of creating a parity data packet as taught by Goddard in the combined of Beeler and Schutzman in order to maintain data server integrity during data reconstruction (Goddard, col. 6, lines 41-52).

With respect to **claim 13**, the combined method of Beeler and Schutzman teaches all the claimed limitations, except that they do not explicitly teach a method of storing the redundant backup data packet on one of the plurality of target clients.

In the same field of endeavor, Goddard teaches a method of storing the redundant data packet on one of the plurality of target clients (Goddard, fig. 6 and col. 6, lines 28-40).

With respect to **claim 16**, Beeler teaches a client for backing up data across a plurality of servers in conjunction with a sequence management apparatus, the server comprising:

a network interface configured to communicate with the sequence management apparatus (Beeler, page 6, paragraphs 84-85);

a storage configured to define an allocated storage (Beeler, fig. 5, page 10, paragraph 125); and

a client backup manager apparatus configured to manage a backup operation across a grid computing system (Beeler: page 1, paragraphs 2 & 8, noted the real time backup system) using a non-transparent sequence (Beeler, page 6, paragraph 84, noted that the a list of available target servers are generated), wherein the non-transparent sequence is unique and exclusively accessible to a global sequence manager (Beeler: page 6, paragraph 84-85, noted the list of available target servers), wherein the source servers and the plurality of target servers are organized in a grid computing system (Beeler: fig. 5, page 2, paragraphs 15 & 19, noted the distributed processing system) and each physical distance between each target server is not less than a minimum distance packet proximity parameter and not more than a maximum distance packet proximity parameter (Beeler: fig. 3 & 5, page 5, paragraph 77 and page 6, paragraphs 84-85. Since Applicant has not included an explicitly meaning of the "minimum" and "maximum" distance packet proximity parameter, the broadest interpretation of such terms are just any arbitrary distances between the servers that is reachable by other servers).

However, Beeler does not explicitly teach a method of using a unique data identifier, wherein the unique data identifier identifies original, non-backup data.

In the same field of endeavor, Goddard teaches a method of using a unique data identifier corresponding to the data to map the data to the source client (Goddard, fig. 2, col. 4 line 59 to col. 5 line 13, noted the server data identifiers).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of server data identifiers as taught by

Goddard in the combined method of Beeler's and Schutzman's invention in order to backup and restore data based on the server data identifiers (Goddard, col. 5, lines 5-13).

However, Beeler does not explicitly teach a method of performing data backup from a source client to a plurality of target servers.

In the same field of endeavor, Schutzman teaches a method of performing data backup from a source client to a plurality of the target servers. (Schutzman, fig. 2, and col. 13, lines 29-55, noted that the host client backs up data to the backup server and the data is being stored in the backup storage servers 114).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the backup host client as taught by Schutzman in Beeler's invention to perform data backup from a client device to a plurality of target storage servers via a source server.

However, the combined method of Beeler and Schutzman does not explicitly teach a method of performing data backup to plurality of the client computers according to a sequence order.

In the same field of endeavor, Goddard teaches a method of performing data backup to plurality of the client computers according to a sequence order (Goddard, figure 2, col. 4 line 60 to col. 5 line 13).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to substitute the plurality of target clients as taught by Goddard in the combined method of Beeler-Schutzman's invention in order to utilize available

storage space of the client information handling systems as a distributed data backup storage system without adding additional storage devices to the source client/source (Goddard, col. 5, lines 2-5).

However, the combined method of Beeler-Schutzman-Goddard does not explicitly teach a feature of having charging client usage fees determined by a subscription manager.

In the same field of endeavor, Crawford teaches a feature of having charging client usage fees determined by a subscription manager (Crawford: abstract, col. 8, lines 24-32 and col. 58, lines 8-39).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to integrate the feature of charging client usage fees by a subscription billing system as taught by Crawford in the combined method of Beeler-Schutzman-Goddard's invention in order to bill the clients for amount of resource being accessed.

A person of ordinary skill in the art at the time of the invention would have been motivated to make the modification to the combined of method of Beeler-Schutzman-Goddard's invention, because having a feature of logging user's usage for the access-granted users would not only allow the system to track the user's usage but also allow the system to have better security access (Crawford: col. 58, lines 40-67).

With respect to **claim 17**, Beeler teaches all the limitations, except that he does not explicitly teach a method of performing data backup from a source client to a plurality of target servers.

In the same field of endeavor, Schutzman teaches a method of performing data backup from a source client to a plurality of the target servers. (Schutzman, fig. 2, and col. 13, lines 29-55, noted that the host client backs up data to the backup server and the data is being stored in the backup storage servers 114).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the backup host client as taught by Schutzman in Beeler's invention to perform data backup from a client device to a plurality of target storage servers via a source server.

With respect to **claim 18**, Beeler teaches all the limitations, except that he does not explicitly teach a method of performing data backup to plurality of the client computers.

In the same field of endeavor, Goddard teaches a method of performing data backup to plurality of the client computers (Goddard, figures 1 and 2, col. 4 lines 1-17).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to substitute the plurality of target clients as taught by Goddard in the combined method of Beeler's and Schutzman's invention in order to back up data to the plurality of client computers without adding additional storage devices to the source client/source (Goddard, col. 2, lines 7-15).

With respect to **claim 19**, Beeler a system for backing up data across a plurality of servers, the system comprising:

a network communications channel (Beeler, fig. 5, page 5, paragraph 75, LAN);

a source server connected to the network communications channel and configured to initiate a data backup operation (Beeler, fig. 5, page 5, paragraph 75, noted the source server 52);

a plurality of target servers connected to the network communications channel and configured to store at least a portion of the data (Beeler, fig. 5, page 5, paragraph 79, noted the target servers 54); and

a global sequence manager connected to the network communications channel and configured to store the data on the plurality of target servers according to a non-transparent sequence (Beeler, fig. 11, page 6, paragraphs 84-85), wherein the non-transparent sequence is unique and exclusively accessible to a global sequence manager (Beeler: page 6, paragraph 84-85, noted the list of available target servers), wherein the source servers and the plurality of target servers are organized in a grid computing system (Beeler: fig. 5, page 2, paragraphs 15 & 19, noted the distributed processing system) and each physical distance between each target server is not less than a minimum distance packet proximity parameter and not more than a maximum distance packet proximity parameter (Beeler: fig. 3 & 5, page 5, paragraph 77 and page 6, paragraphs 84-85. Since Applicant has not included an explicitly meaning of the "minimum" and "maximum" distance packet proximity parameter, the broadest interpretation of such terms are just any arbitrary distances between the servers that is reachable by other servers).

However, Beeler does not explicitly teach a method of performing data backup from a source client to a plurality of target servers.

In the same field of endeavor, Schutzman teaches a method of performing data backup from a source client to a plurality of the target servers. (Schutzman, fig. 2, and col. 13, lines 29-55, noted that the host client backs up data to the backup server and the data is being stored in the backup storage servers 114).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the backup host client as taught by Schutzman in Beeler's invention to perform data backup from a client device to a plurality of target storage servers via a source server.

However, the combined method of Beeler and Schutzman does not explicitly teach a method of performing data backup to plurality of the client computers according to a sequence order.

In the same field of endeavor, Goddard teaches a method of performing data backup to plurality of the client computers according to a sequence order (Goddard, figure 2, col. 4 line 60 to col. 5 line 13).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to substitute the plurality of target clients as taught by Goddard in the combined method of Beeler-Schutzman's invention in order to utilize available storage space of the client information handling systems as a distributed data backup storage system without adding additional storage devices to the source client/source (Goddard, col. 5, lines 2-5).



However, the combined method of Beeler-Schutzman-Goddard does not explicitly teach a feature of having charging client usage fees determined by a subscription manager.

In the same field of endeavor, Crawford teaches a feature of having charging client usage fees determined by a subscription manager (Crawford: abstract, col. 8, lines 24-32 and col. 58, lines 8-39).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to integrate the feature of charging client usage fees by a subscription billing system as taught by Crawford in the combined method of Beeler-Schutzman-Goddard's invention in order to bill the clients for amount of resource being accessed.

A person of ordinary skill in the art at the time of the invention would have been motivated to make the modification to the combined of method of Beeler-Schutzman-Goddard's invention, because having a feature of logging user's usage for the access-granted users would not only allow the system to track the user's usage but also allow the system to have better security access (Crawford: col. 58, lines 40-67).

**Claim 20** lists all the same elements of **claims 4 and 5**. Therefore, the supporting rationale of the rejection to **claims 4 and 5** applies equally as well to **claim 20**.

With respect to **claim 22**, Beeler teaches the system of claim 21, wherein the global sequence manager and subscription manager are further configured to track a source storage allocation parameter of the source client (Beeler, page 7, paragraph 95).

With respect to **claim 23**, Beeler teaches the system of claim 21, wherein the global sequence manager and subscription manager are further configured to track a target storage allocation parameter of each of the plurality of target clients (Beeler, page 6, paragraph 94).

With respect to **claim 24**, Beeler teaches the system of claim 21, wherein the global sequence manager and subscription manager are configured to track a resource allocation parameter (Beeler, pages 6-7, paragraphs 94-95).

With respect to **claim 25**, Beeler teaches the system of claim 24, wherein the resource allocation parameter is selected from the group consisting of a network allocation parameter, a client processor parameter, and a client bandwidth parameter (Beeler, pages 6-7, paragraphs 94-95).

In regard to **claim 30**, the limitations of these claims are substantially the same as those in claim 1. Therefore the same rationale for rejecting claim 1 is used to reject claim 30. By this rationale **claim 30** is rejected.

In regard to **claim 31**, the limitations of these claims are substantially the same as those in claims 2 and 3. Therefore the same rationale for rejecting claims 2 and 3 is used to reject claim 31. By this rationale **claim 31** is rejected.

In regard to **claim 32**, the limitations of these claims are substantially the same as those in claim 9. Therefore the same rationale for rejecting claim 9 is used to reject claim 32. By this rationale **claim 32** is rejected.

In regard to **claim 33**, the limitations of these claims are substantially the same as those in claim 4. Therefore the same rationale for rejecting claim 4 is used to reject claim 33. By this rationale **claim 33** is rejected.

In regard to **claim 35**, the limitations of these claims are substantially the same as those in claims 24 and 25. Therefore the same rationale for rejecting claims 24 and 25 is used to reject claim 25. By this rationale **claim 25** is rejected.

With respect to **claim 36**, Beeler teaches a method for backing up data across a plurality of servers, the method comprising:

requesting data to be backed up from a source client (Beeler, fig. 5, page 6, paragraph 91);

receiving data to be backed up from a source server (Beeler, page 5, paragraphs 78-79, noted that the workstation 30 initiates the backup request from a source server to target servers);

separating the data into a plurality of backup data packets (Beeler, page 9, paragraph 113);

generating a non-transparent sequence of a plurality of target servers (Beeler, page 6, paragraph 91, and page 9, paragraph 121, noted that the data is backed up from the source server to target servers), wherein the non-transparent sequence is

unique and exclusively accessible to a global sequence manager (Beeler: page 6, paragraph 84-85, noted the list of available target servers);

storing the backup data packets on the plurality of target servers according to the non-transparent sequence (Beeler, page 6, paragraph 91, and page 9, paragraph 121, noted that the data is backed up from the source server to target servers), wherein the source servers and the plurality of target servers are organized in a grid computing system (Beeler: fig. 5, page 2, paragraphs 15 & 19, noted the distributed processing system) and each physical distance between each target server is not less than a minimum distance packet proximity parameter and not more than a maximum distance packet proximity parameter (Beeler: fig. 3 & 5, page 5, paragraph 77 and page 6, paragraphs 84-85. Since Applicant has not included an explicitly meaning of the "minimum" and "maximum" distance packet proximity parameter, the broadest interpretation of such terms are just any arbitrary distances between the servers that is reachable by other servers);

managing a metadata file descriptive of the data backed up on the plurality of target servers (Beeler, fig. 17, page 8, paragraph 105, noted the transaction log);

tracking a resource allocation parameter, wherein the resource allocation parameter is one of a source storage allocation parameter, a target storage allocation parameter, a network allocation parameter, a client processor parameter, and a client bandwidth parameter (Beeler, pages 6-7, paragraphs 94-95); and

managing a contractual subscription of the source server and the plurality of target servers (Beeler, fig. 11, page 6, paragraph 88).

However, Beeler does not explicitly teach a method of performing data backup from a source client to a plurality of target servers.

In the same field of endeavor, Schutzman teaches a method of performing data backup from a source client to a plurality of the target servers. (Schutzman, fig. 2, and col. 13, lines 29-55, noted that the host client backs up data to the backup server and the data is being stored in the backup storage servers 114).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the backup host client as taught by Schutzman in Beeler's invention to perform data backup from a client device to a plurality of target storage servers via a source server.

However, the combined method of Beeler and Schutzman does not explicitly teach a method of performing data backup to plurality of the client computers according to a sequence order.

In the same field of endeavor, Goddard teaches a method of performing data backup to plurality of the client computers according to a sequence order (Goddard, figure 2, col. 4 line 60 to col. 5 line 13).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to substitute the plurality of target clients as taught by Goddard in the combined method of Beeler-Schutzman's invention in order to utilize available storage space of the client information handling systems as a distributed data backup storage system without adding additional storage devices to the source client/source (Goddard, col. 5, lines 2-5).

The combined method of Beeler and Schutzman teaches all the claimed limitations, except that they do not explicitly teach a method of using a unique data identifier corresponding to the data to map the data to the source client.

In the same field of endeavor, Goddard teaches a method of using a unique data identifier corresponding to the data to map the data to the source client (Goddard, fig. 2, col. 4 line 59 to col. 5 line 13, noted the server data identifiers).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of server data identifiers as taught by Goddard in the combined method of Beeler's and Schutzman's invention in order to backup and restore data based on the server data identifiers (Goddard, col. 5, lines 5-13).

However, the combined method of Beeler-Schutzman-Goddard does not explicitly teach a feature of having charging client usage fees determined by a subscription manager.

In the same field of endeavor, Crawford teaches a feature of having charging client usage fees determined by a subscription manager (Crawford: abstract, col. 8, lines 24-32 and col. 58, lines 8-39).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to integrate the feature of charging client usage fees by a subscription billing system as taught by Crawford in the combined method of Beeler-Schutzman-Goddard's invention in order to bill the clients for amount of resource being accessed.

A person of ordinary skill in the art at the time of the invention would have been motivated to make the modification to the combined of method of Beeler-Schutzman-Goddard's invention, because having a feature of logging user's usage for the access-granted users would not only allow the system to track the user's usage but also allow the system to have better security access (Crawford: col. 58, lines 40-67).

In regard to **claim 37**, the limitations of these claims are substantially the same as those in claim 1, but rather in a computer code stored in a computer storage medium form. Therefore the same rationale for rejecting claim 1 is used to reject claim 37. By this rationale **claim 37** is rejected.

In regard to **claim 38**, the limitations of these claims are substantially the same as those in claims 2 and 3. Therefore the same rationale for rejecting claims 2 and 3 is used to reject claim 38. By this rationale **claim 38** is rejected.

In regard to **claim 39**, the limitations of these claims are substantially the same as those in claim 4. Therefore the same rationale for rejecting claim 4 is used to reject claim 39. By this rationale **claim 39** is rejected.

In regard to **claim 40**, the limitations of these claims are substantially the same as those in claim 7. Therefore the same rationale for rejecting claim 7 is used to reject claim 40. By this rationale **claim 40** is rejected.

In regard to **claim 41**, the limitations of these claims are substantially the same as those in claim 8. Therefore the same rationale for rejecting claim 8 is used to reject claim 41. By this rationale **claim 41** is rejected.

In regard to **claim 42**, the limitations of these claims are substantially the same as those in claim 9. Therefore the same rationale for rejecting claim 9 is used to reject claim 42. By this rationale **claim 42** is rejected.

In regard to **claim 44**, the limitations of these claims are substantially the same as those in claims 10-13. Therefore the same rationale for rejecting claims 10-13 is used to reject claim 44. By this rationale **claim 44** is rejected.

In regard to **claim 46**, the limitations of these claims are substantially the same as those in claim 1. Therefore the same rationale for rejecting claim 1 is used to reject claim 46. By this rationale **claim 46** is rejected.

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Beeler, JR. (publication no.: US 2004/0083245 A1)** in view of **Schutzman et al. (Patent no.: US 6,505,216 B1)** and **Goddard (patent no.: US 6,883,110 B1)** and **Crawford (Patent no. US 5,771, 354)** and further in view of **Padmanabhan et al. (Patent no.: US 7,296,088 B1)**.

With respect to **claim 15**, Beeler teaches the apparatus of claim 1, wherein the packet storage module stores the backup data packets on the plurality of target clients according to a packet proximity parameter, the packet proximity parameter defining at least one of a minimum and a maximum distance between a first target client and a second target client (Beeler, page 6, paragraph 84).



However, the combined method of Beeler-Schutzman-Goddard does not explicitly teach a method of selecting the distance from a physical distance and an internet protocol address distance.

In the same field of endeavor, Padmanabhan teaches a method of selecting the distance from a physical distance and an internet protocol address distance (Padmanabhan, abstract, col. 8, lines 18-58, and col. 10, col. 27-57).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the method of selecting the distance from an internet protocol address as taught by Padmanabhan in the combined method of Beeler-Schutzman-Goddard's invention in order to get the shortest path between the client locations (Padmanabhan: col. 10, lines 48-52) and backup the data packets thereafter.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Liu whose telephone number is (571) 270-1447.

The examiner can normally be reached on Monday - Friday, 7:30am - 5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. L./  
/Lin Liu/

Examiner, Art Unit 2445

/Jason D Cardone/  
Supervisory Patent Examiner, Art Unit 2445